Include the real time Google Firebase Database Library

Include the Library responsible to run the DHT Series of Temperature-Humidity Sensors

Include the Library Responsible to run one of the state-of-the-art ESP8266 WIFI Node Microcontroller Unit

Define the web location to connect to in order to access and login for accessing the Google Firebase Data log

Define Changing and Setting the Wi-Fi SSID User to "Hello Daily"

Define Changing and Setting the Wi-Fi Password network PIN to "Welcome2daily"

Connect the Digital Output Pin '14' of Arduino to Data Pin of DHT 11 the Temperature-Humidity Sensor

Define and ascends to the library that the sensor connected from the DHT series of Temp-RH Sensors is 'DHT 11'

Define the location in the EPROM memory to story the array of characters

Define the DHT and dht respectively

Initialize GPIO2 pin as an output

Initialize GPIO14 pin as an output

Start serial port

Begins Communications and Starts and Leases the Wi-Fi to the Previously Defined User and Network Key.

while (Wi-Fi is not CONNECTED)

(

Print in Serial Monitor

Turn the LED on

Delay of 300 milliseconds

Turn the LED off

Delay of 300 milliseconds

)

Enabling and Leasing the DHT Sensor to function and enable operations.

Initialize data Pin of Rain Sensor for NodeMCU D2 GPIO no. is 4.

Serial Print in a new Line 'Wi-Fi Connected!' when it connects to a Receiver Device.

Turn the LED on

Beginning to access the Fire database and establishing it as a 'HOST'.

loop

(

Signal DHT to read Relative Humidity and functionalising it as a floating decimal value.

Signal DHT to read Temperature in Celsius and functionalising it as a floating decimal value.

Reading the Rain Sensor Data

Declaration for temperature

set float reading from the sensor

ridging it to the Google Fire Database

Serial printing temperature

Declaration for Relative Humidity

set float reading from the sensor

ridging it to the Google Fire Database

Serial printing humidity

if (r is equal 1)

(

Turn-on LED 2

Declaration signalling Not raining

Ridging it to the Google Fire Database.

Serial printing Not raining

)

else

(

Turnoff LED 2

Declaration signalling Raining

Ridging it to the Google Fire Database

Serial printing Raining

)

delay 200 milliseconds

if(error in writing to firebase)

(

Serial print error and error code.

Blink LED 4 times with 500 milliseconds gap if error in writing in Firebase

)

return to start of loop

)